# **AVERATEC**

# N1000 Series User's Guide













# **Regulations Information**

# FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ✓ Reorient or relocate the receiving antenna.
- ✓ Increase the separation between the equipment and receiver.
- ✓ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ✓ Consult the dealer or an experienced radio TV technician for help.

#### NOTE

- ✓ The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- ✓ Shield interface cables and AC power cord, if any must be used in order to comply with the emission limits.

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#### **FCC Conditions**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.



For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

# Safety Guideline for Using Lithium Battery

(Danish) ADVARSEL! Lithiumbatteri --- Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri af same fabrikat og type. Levé det brugte batteri tilbage til leverandøren.

(Deutsch) VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

(English) CAUTION: Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturers instructions.

(Finnish) VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

(French) ATTENTION: Il y a danger dex; losion sil y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou dun type équivalent recommandé par le constructeur. Mettre au rebut les batteries usages conformément aux instructions du fabricant.

(Norwegian) ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt same batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.

Brukte batterier kasseres I henhold til fabrikantens instruksjoner.

(Swedish) VARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruction.

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### **Macrovision Notice**

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# Safety Instructions

- 1. Read the safety instructions carefully and thoroughly.
- 2. Save this User Guide for possible use later.
- 3. Keep this equipment away from humidity and high temperature.
- 4. Lay this equipment on a stable surface before setting it up.
- 5. The openings on the enclosure are used for air convection and to prevent the equipment from overheating. Do not cover the openings.
- 6. Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power inlet.
- 7. Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.
- 8. Always unplug the power cord before inserting any add-on card or module.
- 9. All cautions and warnings on the equipment should be noted.
- 10. If any of the following situations arises, get the equipment checked by a service personnel:
  - ✓ The power cord or plug is damaged.
  - ✓ Liquid has penetrated into the equipment.

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- ✓ The equipment has been exposed to moisture.
- ✓ The equipment has not worked well or you can not get it work according to Users Manual.
- ✓ The equipment was dropped and damaged.
- ✓ The equipment has obvious signs of breakage.
- 11. Never pour any liquid into the opening that could damage the equipment or cause an electrical shock.
- 12. Do not leave the equipment in an unconditioned environment with a storage temperature of 60°C (140°F) or above, which may damage the equipment.
- 13. To prevent explosion caused by improper battery replacement, use the same or equivalent type of battery recommended by the manufacturer only.

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### **WEEE Statement**

(English) Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

(Deutsch) Gemäß der Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte dürfen Elektro- und Elektronik-Altgeräte nicht mehr als kommunale Abfälle entsorgt werden, die sich auf 13.August, 2005 wirken. Und der Hersteller von bedeckt Elektronik-Altgeräte gesetzlich zur gebrachten Produkte am Ende seines Baruchbarkeitsdauer zurückzunehmen.

(Français) Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie.

(English) As of this writing, the e-waste legislation is undergoing review in the United States Congress. "WEEE" legislation for the United States will be limited to the individual States.

(Русский) В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы.

(Español) Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como "eléctricos y equipos electrónicos" no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su período de vida.

(Nederlands) De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Electrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus..

(Srpski) Po Direktivi Evropske unije ("EU") o odbačenoj ekektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja.

(Polski) Zgodnie z Dyrektywą Unii Europejskiej ("UE") dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. "produkty oraz wyposażenie elektryczne i elektroniczne" nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia.

(TÜRKÇE) Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılamayacak ve bu elektonik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır.

(ČESKY) Podle směrnice Evropské unie ("EU") o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat "elektrické a elektronické výrobky" v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti.

(MAGYAR) Az Európai Unió ("EU") 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetőek lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelessé válnak az ilyen termékek visszavételére azok hasznos élettartama végén.

(Italiano) In base alla Direttiva dell'Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita..

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# Release History

Version	Revision Note	Date
1.0	First Release	08, 2008

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# Chapter 1

### How to Use This Manual

This Users Manual provides instructions and illustrations on how to operate this notebook. It is recommended to read this manual carefully before using this notebook.

Chapter 1, General Introductions, includes the descriptions of all the accessories of this notebook. It is recommended that verify you have all the accessories included when you open the packing box. If any item is damaged or missing, please contact the vendor where you purchased this notebook.

Chapter 2, Getting Started, provides the specification of this notebook, and introduces the function buttons, connectors, LEDs and external ports of this notebook. Also, this chapter provides the correct procedure for installing or uninstalling the battery pack, and some ideas on how best to use this notebook.

**Chapter 3, Customizing this Notebook**, provides instructions on connecting the mouse, keyboard, printer, external monitor, communication devices.

**Chapter 4, BIOS setup**, provides information on the BIOS Setup program and allows you to configure the system for optimum use.

# Unpacking

First, unpack the shipping carton and check all items carefully. If any item contained is damaged or missing, please contact your local dealer immediately. Keep the box and packing materials in case you need to ship the unit in the future.

The package should contain the following items:

- ✓ Notebook
- ✓ Quick Start Guide
- ✓ All-in-one application disk, containing the drivers, utilities, and optional recovery disk.
- ✓ High-capacity Li-ion battery pack
- ✓ AC adapter and power cord

These accessories listed above may change without notice.

# Chapter 2

# **Specification**

Physical Characteristic	
Dimension	260 (W) x 180 (D) x 19~31.5 (H) mm
Weight	940g (Without battery pack)
CPU	
Processor Type	Socket 478
Support Processor	Intel® Atom N270 processor(45mm)
Core Chips	
North Bridge	Intel® 945GSE
South Bridge	Intel® ICH7M
Memory	
Technology	DDR2 667/ 800
Memory	DDR2 SO-DIMM X 1 slot
	512/ 1024 MB
	DDR2 SDRAM
Maximum	2GB (1GB DDR2 SO-DIMM x 1)
Power	
AC Adapter	40W, 19 Volt
Battery Type	3 cells (Li-lon)
	6 cells (Li-lon) (optional)
RTC Battery	Yes

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Storage	
HDD form factor	2.5" 9.5mm High, 5400 rpm,
	80/ 100/ 120/ 160 GB
I/O Port	
Monitor	D-Sub x 1
USB	x 3 (USB version 2.0)
Headphone Out	x 1
Mic-in	x 1
RJ45	x 1
Card Reader	x 1 (SD/ MMC/ MS)
Communication Port	
PTT Approval	Yes (FCC/CTR21/JATE)
LAN	10/100 Ethernet, Realtek 8102E
Wake on LAN	Yes
Wireless Lan	802.11b/g
Display	
LCD Type	10.2"
Brightness	Brightness controlled by K/B hot-keys
LCD	1,024 x 600 for WXGA
Dual View Function	LCD or CRT will be auto detected when connected.
CRT	640 x 480, max. 32bit color
	800 x 600, max. 32bit color
	1024 x 600, max. 32bit color

Audio	
Internal Speaker	ALC 888s
Sound Volume	2 Speakers with housing
	Adjust by volume button, K/B hot-key & SW
Software & BIOS	
USB Flash Boot	Yes, USB floppy boot up DOS only
BIOS	Fast Boot Support Yes
Others	
Kensington Lock	x 1

## **Product Overview**

This section provides the description of basic aspects of your notebook. It will help you to know more about the features of this notebook before using it.

#### NOTE

✓ The notebook shown here may vary from the actual one.

### **Top-open View**

Press the Cover to open the Display Panel. The figure of top-open view and description shown below will lead you to browse the main operating area of your notebook.



#### 1. Webcam/ Webcam LED

The built-in Webcam can be used for picture taking, video recoding or conferencing, and any other interactive applications.

Webcam LED indicator, next to the webcam, glows orange when the webcam function is activated. LED goes out when this function is turned off.

#### 2. Power Button / Power LED

Power Button:

Press the power button to turn the notebook power ON and OFF.

 $\mathbf{O}$ 

#### Power LED:

Glowing blue when the notebook power is turned on.

Glowing green when the ECO function is activated; LED goes off when the unit is turned off.

#### 3. Keyboard

The built-in keyboard provides all the functions of a full-sized (US-defined) keyboard.

Quick Launch [Fn] Buttons

Use the [Fn] buttons on the keyboard to activate the specific applications or tools. With the help of these quick launch buttons, users will be able to use specific functions more easily.



Press and hold the **Fn** button, and then press the **F6** button to turn the Webcam function on. Press again to turn it off.activated.



Press and hold the **Fn** button, and then press the **F11** button repeatedly to enable or disable the Wireless LAN or Bluetooth function recurrently.

#### 4. Status LED

	Hard Disk/ Optical Drive Device In-use:
9	Blinking green when the system is accessing the hard disk
	drive or the optical drive device.
A	Scroll Lock:
	Glowing green when the Scroll Lock function is activated.
<b>1</b>	Num Lock:
1	Glowing green when the Num Lock function is activated.
	Caps Lock:
	Glowing green when the Caps Lock function is activated.
	Battery Status
	- Glowing green when the battery is being charged.
	- Glowing amber when the battery is in low battery status.
	- Blinking amber if the battery fails and it is recommended to
1+	replace a new battery. Consult the local dealer for purchasing
	an equivalent type of battery recommended by the
	manufacturer.
	- Battery LED goes out when it is fully charged or when the AC
	adapter is disconnected.

	Power On/ Off/ Suspend:
C	- Blinking green when the system is in suspend mode.
	- LED goes out when the system is turned off.
	Wireless LAN:
<b>Si</b> Wireless LAN	- Wireless LAN LED indicator glows green when Wireless LAN function is enabled.
Wileless LAIN	Note: For flight safety consideration, make sure this LED indicator is out when you are in flight.

### 5. Touchpad

This is the pointing device of the notebook.

### Right-side View



#### 1. USB Port

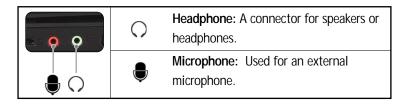
The USB 2.0 port allows you to connect USB-interface peripheral devices, such as a mouse, keyboard, modem, portable hard disk module, printer and more.

#### 2. Card Reader

The built-in card reader may support various types of memory card, such as MMC (Multi-Media Card), XD (eXtreme Digital), SD (Secure Digital), SDHC (SD High Capacity), MS (Memory Stick) or MS Pro (Memory Stick) Pro) cards. Contact the local dealer for further and correct information and be noted that the supported memory cards may vary without notice.

#### 3. Audio Port Connectors

Allows for high quality stereo sound and Hi-Fi function ality.



#### 4. VGA Port

The 15-pin-D-sub VGA port allows you to connect an external monitor or other standard VGA-compatible device (such as a projector) for a great view of the computer display.

#### 5. RJ-45 Connector

The 10/100 Ethernet connector is used to connect a LAN cable for network connection.

#### Left-side View



#### 1. Kensington Lock

This notebook provides a Kensington Lock hole, which allows users to secure the notebook in place with a key or some mechanical PIN device and attached through a rubberised metal cable. The end of the cable has a small loop which allows the whole cable to be looped around a permanent object, such as a heavy table or other similar equipment, thus securing the notebook in place.

#### 2. Power Connector

To connect the AC adapter and supply power for the notebook.

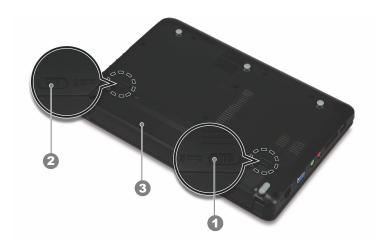
#### 3. Ventilator

The ventilator is designed to cool the system. DO NOT block the ventilator for air circulation.

#### 4. USB Port

The USB 2.0 port allows you to connect USB-interface peripheral devices, such as the mouse, keyboard, modem, portable hard disk module, printer and more.

#### **Bottom View**



#### 1. Battery Release Latch

The battery release latch is spring-loaded and allows for easy removal of the battery pack. To remove the battery, push the latch it with one hand and pull the battery pack carefully with the other.

#### 2. Battery Lock/Unlock Button

Battery cannot be moved when the button is positioned on lock status. Once the button is slid to unlock position, the battery is removable.

#### 3. Battery Pack

This notebook will be powered by the battery pack when the AC adapter is disconnected.

# **Power Management**

### **AC Adapter**

Please note it is strongly recommended to connect the AC adapter and use the AC power while using this notebook for the first time. When the AC adapter is connected, the battery will begin charging immediately.

NOTE that the AC adapter included in the package is approved for your notebook; using other adapters from other manufacturers may damage the notebook or other devices on the notebook and will void the warranty of your unit.

#### Connecting the AC Power

- 1. Unpack the contents to find the AC adapter and power cord.
- 2. Attach the power cord to the connector of the AC adapter.
- Plug the DC end of the adapter to the notebook, and the male end of the power cord to the electrical outlet.



#### Disconnecting the AC Power

When you disconnect the AC adapter, you should:

- 1. Unplug the power cord from the electrical outlet first.
- 2. Unplug the connector from the notebook.
- 3. Disconnect the power cord and the connector of AC adapter.
- 4. When unplugging the power cord, always hold the connector part of the cord. Never pull the cord directly!

# **Battery Pack**

This notebook is equipped with a high-capacity Li-ion Battery pack. The rechargeable correct the paragraph Li-ion battery pack is the internal power source of the notebook when the AC adapter is not being used.

#### Releasing the Battery Pack

To remove the battery pack:

- 1. Make sure the Notebook is turned off, and the AC power is disconnected.
- 2. Check to ensure the Lock/Unlock button is in unlocked position.
- 3. Locate the Battery Release Button on the bottom side.
- 4. Push the Release Button to the direction of arrow below the button.
- 5. Slide the left side of the battery pack out first from the battery compartment and then pull the right side of the battery pack.



#### Replacing the Battery Pack

- 1. Insert the right side of battery pack into the battery compartment as shown.
- 2. Next, slide the left side of the battery and press the battery pack into place. There will be an audible CLICK once the battery seated properly.
- 3. Make sure the Lock/Unlock Button is in lock position.



### Warning

- ✓ Do not try to disassemble THE BATTERY PACK.
- ✓ Please follow your local laws and regulations to recycle the unused battery pack.

### **Using the Battery Pack**

#### **Battery Safety Tips**

Replacing or handling the battery incorrectly may present a risk of fire or explosion, which could cause serious injury.

- ✓ Only replace the main battery pack with the same or equivalent type of battery.
- ✓ Do not disassemble, short-circuit or incinerate batteries or store them to temperatures above +60°C (+140°F).
- ✓ Do not temper with batteries. Keep them away from children.
- ✓ Do not use rusty or damaged batteries.
- ✓ Dispose of batteries according to local regulations. Check with your local solid waste officials for details about recycling options or for proper disposal in your area.

#### Conserving Battery Power

Efficient battery power is critical to maintain a normal operation. If the battery power is not managed well, the saved data and customized settings may be lost.

Follow these tips to help optimize battery life and avoid a sudden power loss.

- ✓ Suspend system operation if the system will be idle for a while or shorten the Suspend Timers time period.
- ✓ Turn off the system if you will not be using it for a long period of time.
- ✓ Disable unneeded settings or remove idle peripherals to conserve power.
- ✓ Connect an AC adapter to the system whenever possible.

#### Charging the Battery Pack

The battery pack can be recharged while it is installed in the Notebook. Please pay attention to the following tips before recharging the battery:

- ✓ If a charged battery pack is not available, save your work and close all running programs and shut down the system or Save-to-Disk(Hibernate).
- ✓ Plug in an external AC/DC power source.
- ✓ You can use the system, suspend system operation or shut down and turn off the system without interrupting the charging process.
- ✓ The battery pack uses Lithium-ion battery cells that have no "memory effect." There is need to discharge the battery pack before you begin charging. However, to optimize the life of battery, we suggest that consuming the battery power completely once a month is necessary recommended.
- ✓ If you do not use the Notebook for a long Period of time, it is suggested to remove the battery pack from your Notebook. This may be helpful to extend your battery life.
- ✓ The actual charging time will be determined by the applications in use.

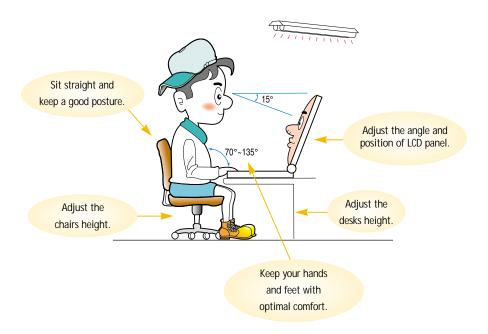
# **Basic Operations**

### Safety and Comfort Tips

The Notebook is a portable platform that allows you to work anywhere.

However, choosing a good workspace is important if you have to work with your Notebook for long periods of time.

- ✓ Your work area should have enough illumination.
- ✓ Choose the proper desk and chair and adjust their height to fit your
  posture when operating.
- ✓ When sitting, adjust the chair to support your back comfortably.
- ✓ Place you feet flat and naturally on the floor, so that your knees and elbows have the proper position (about 90-degree) when operating.
- ✓ Put your hands on the desk naturally to support your wrists.
- ✓ Adjust the angle/position of the LCD panel, so that you can have the
  optimal view.
- ✓ Avoid using your Notebook in a location where it may cause you discomfort.
- ✓ The Notebook is an electrical device, please treat it with great care to avoid personal injury.



#### Have a Good Work Habit

Having a good work habit is important if you have to work with your Notebook for long periods of time; otherwise, it may cause discomfort or injury to you. Please keep the following tips in mind when operating.

- ✓ Change your posture frequently.
- ✓ Stretch and exercise you body regularly.
- ✓ Remember to take breaks after working for a period of time.

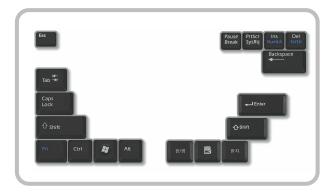
### **Knowing the Keyboard**

The notebook's keyboard provides all the functions of a full-sized keyboard and an additional [Fn] key for specific functions on the notebook. The keyboard can be divided into four categories: Typewriter keys, Cursor keys, Numeric keys and Function keys.



#### **Typewriter Keys**

The function of these Typewriter keys is the major function of the keyboard, which is similar to the keys on a typewriter. It also provides several keys for special purposes, such as the [Ctrl], [Alt] and [Esc] key.



When the lock keys are pressed, the corresponding LEDs will light up to indicate their status:

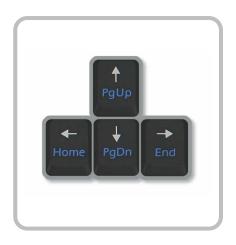
- ✓ Num Lock : Press and hold the [Fn] key and press this key to toggle the Num Lock on and off. When this function is activated, you can use the numeric keys that are embedded in the typewriter keys.
- ✓ Caps Lock: Press this key to toggle the Caps Lock on and off. When this
  function is activated, the letters you type are kept in
  uppercase.
- ✓ Scroll Lock: Press and hold the [Fn] key and press this key to toggle the Scroll Lock on and off. This function is defined by individual programs, and it is usually used under DOS.

The Backspace key, [Ins] and [Del] keys at upper right corner are use for editing purpose.

Ins Num Lk	This key is used to switch the typing mode between "insert and "overtype modes.
Del Scr Lk	Press this key to delete one character to the right of the cursor and move the following text left for one space.
Backspace <b>←</b>	Press this key to delete one character to the left of the cursor and move the following text left for one space.

### **Cursor Keys**

The keyboard provides four cursor(arrow) keys and [Home], [PgUp], [PgDn], [End] keys at the lower right corner, which are used to control the cursor movement.



-	Move the cursor left for one space.
<b>→</b>	Move the cursor right for one space.
1	Move the cursor up for one line.
1	Move the cursor down for one line.
PgUp	Move to the previous page.
PgDn	Move to the next page.
Home	Move to the beginning of the line (or document).
End	Move to the end of the line (or document).

### **Numeric Keys**

The keyboard provides a set of numeric keypad, which is embedded in the typewriter keys. When the Num Lock is activated, you can use these numeric keys to enter numbers and calculations.



### **Function Keys**

### ✓ Windows Keys

You can find the Windows Logo key and one Application Logo key on the keyboard, which are used to perform Windows-specific functions, such as opening the Start menu and launching the shortcut menu. For more information of the two keys, please refer to your Windows manual or online help.

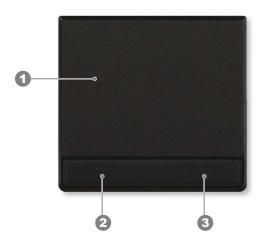


### ✓ [Fn] Key

Fn + F2	Switch the display output mode between the LCD, external monitor and Both.
Fn + F3	Enable or disable the touchpad function.
Fn + F4 **	Decrease the LCD brightness.
Fn + F5	Increase the LCD brightness.
Fn + F7	Decrease the built-in speakers volume.
Fn + F8	Increase the built-in speakers volume.
Fn + F9	Disable the computers audio function.
Fn + F11 x	Enable or disable the Wireless LAN function.
Fn   +   F12   z'	Force the computer into suspend mode(depending on the system configuration).

### **Knowing the Touchpad**

The touchpad integrated in your notebook is a pointing device that is compatible with a standard mouse, allowing you to control the notebook by pointing the location of the cursor on the screen and making selection with its two buttons.



#### 1. Cursor Movement Area

This pressure-sensitive area of the touchpad, allows you to place your finger on it and control the cursor on the screen by moving your finger.

#### 2. Left Button

Acts as left mouse button.

### 3. Right Button

Acts as right mouse button.

### Using the Touchpad

Read the following description to learn how to use the touchpad:

#### ✓ Positioning and Moving

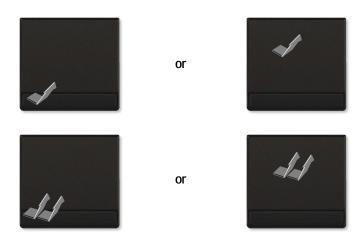
Place your finger on the touchpad (usually using the forefinger), and the rectangular pad will act as a miniature duplicate of your display. When you move your fingertip across the pad, the cursor on the screen will move simultaneously in the same direction. When your finger reaches the edge of the pad, lift your finger and replace it on a proper location of the touchpad.

#### ✓ Point and Click

When you have moved and placed the cursor over an icon, a menu item or a command that you want to execute, simply tap slightly on the touchpad or press the left button to select. This procedure, called as point and click is the basics of operating your Notebook. Unlike the traditional pointing device such as the mouse, the whole touchpad can act as a left button, so that your each tap on the touchpad is equivalent to pressing the left button. Tapping twice more rapidly on the touchpad is to execute a double-click.

### ✓ Drag and Drop

You can move files or objects in your Notebook by using drag-and-drop. To do so, place the cursor on the desired item and slightly tap twice on the touchpad, and then keep your fingertip in contact with the touchpad on the second tap. Now, you can drag the selected item to the desired location by moving your finger on the touchpad, and then lift your finger from the touchpad to drop the item into place. Alternately, you can press and hold the left button when you select an item, and then move your finger to the desired location; finally, release the left button to finish the drag-and-drop operation.



### ✓ Configuring the Touchpad

You can customize the pointing device to meet your personal needs. For example, if you are a left-hand user, you may want to swap the functions of the two buttons. In addition, you can change the size, shape, moving speed and other advanced features of the cursor on the screen. To configure the touchpad, you can use the standard Microsoft or IBM PS/2 driver in your Windows operating system. The Mouse Properties in Control Panel allows you to change the configuration.

### **About Hard Disk Drive**

Your notebook is equipped with a 2.5-inch hard disk drive. The hard disk drive is a storage device with much higher speed and larger capacity than other storage devices, such as the floppy disk drive and optical storage devices. Therefore, it is usually used to install the operating system and software applications.

#### Info

- ✓ To avoid unexpected data loss in your system, please backup your critical files regularly.
- ✓ Do not turn off the Notebook when the Hard Disk In-use LED is on.
- ✓ Do not remove or install the hard disk drive when the Notebook is turned on. The replacement of hard disk drive should be done by an authorized retailer or service representative.

## Chapter 3

### **Connecting the External Devices**

The I/O (input/output) ports on the notebook allow you to connect peripheral devices.

### Connecting the Peripheral Devices

### Connecting a Mouse

You can connect a mouse to your notebook through the USB port. If you have a PS/2 mouse, please purchase a PS/2-USB connector first. To connect the mouse:

- 1. Turn on the notebook and install the mouse driver.
- 2. Connect your mouse to the notebook.
- 3. The notebook may auto detect your mouse driver and enable the mouse function. If there is no detection of you mouse you can manually enable the mouse by going to Start Menu ➤ Control Panel ➤ Add Hardware to add the new device.



### Connecting the Keyboard

You can connect a keyboard to your Notebook through the USB port.

If you have a PS/2 keyboard, please purchase a PS/2-USB connector first. To connect the keyboard:

- 1. Turn on the notebook and install the keyboard driver.
- 2. Connect your keyboard to the notebook.
- 3. The notebook may auto detect your keyboard driver and enable the keyboard function.

If there is no detection of you keyboard you can manually enable the keyboard by going to **Start Menu** ▶ **Control Panel** ▶ **Add Hardware** to add the new device.



### Connecting the Printer

If your printer has a USB interface, you can then use the USB port on the notebook to connect the printer. The following instruction describes the general procedure to connect a printer:

- 1. Turn off the notebook.
- 2. Connect one end of the printer cable to the notebooks USB port and the other end to the printer.
- 3. Connect the power cord and turn on the printer.
- 4. Turn on the notebook and the system will detect a new device. Install the required driver.

For further instructions, please refer to your printers manual.

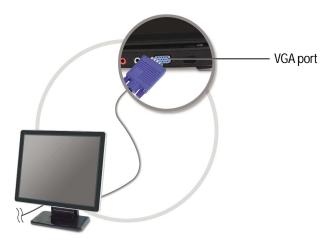


Printer(not included)

### Connecting an External Monitor

You can connect an external monitor to your notebook through the VGA port for a larger view with higher resolution. To connect the monitor:

- 1. Make sure that the notebook is turned off.
- 2. Plug the monitors D-type connector into the notebooks VGA port.
- 3. Connect the monitors power cord and turn on the monitor.
- 4. Turn on the notebook and the monitor should respond by default. If not, you can switch the display mode by pressing [Fn]+[F2]. Alternately, you can change the display mode by configuring the settings in **Display Properties** of Windows operating system.



Monitor(not included)

### **Connecting the Communication Devices**

### Using the LAN

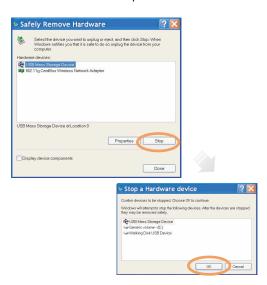
The RJ-45 connector of the notebook allows you to connect the LAN (local area network) devices, such as a hub, switch and gateway, to build a network connection. This built-in 10/100 Base-T LAN module supports data transfer rate up to 100Mbps.

For more instructions or detailed steps on connecting to the LAN, please ask your MIS staff or network manager for help.



### Safely Remove Hardware

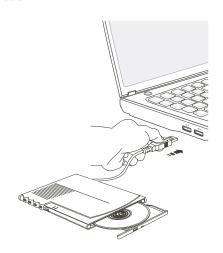
If you connect any peripheral device to your system, the Safely Remove Hardware icon() will appear on the taskbar. Double-click the icon to bring up the Safely Remove Hardware dialog box. You can see all connected peripheral devices here. If you want to remove any of the devices, move the cursor to the device and click Stop.



# Connecting the External Optical Storage Device

An optional external optical storage device may come with the package of the notebook. The actual external optical storage device may vary depending on the model you purchased.

- **DVD Combo Drive**: This device allows you to read DVD and CD, and record CD format.
- DVD Dual Drive: In addition to read DVD and CD, this device allows you to record CD format and both the -R/RW and +R/RW DVD format.
- DVD Multi: Works as a milti-functional DVD Dual Drive and a DVD RAM Drive.
- Blue-ray: It is a high-capacity optical disk that holds the high-definition video (HD) on a single-sided disk. Blue-ray supports the more advanced H.264 and VC-1 video encoding algorithms (codecs) as well as MPEG-2, Which is used for DVD. It also supports the highest HDTV resolution.



# Chapter 4

### **About BIOS Setup**

### When to Use BIOS Setup?

You may need to run the BIOS Setup when:

- ✓ An error message appears on the screen during the system booting up and requests you to run SETUP.
- ✓ You want to change the default settings for customized features.
- ✓ You want to reload the default BIOS settings.

### How to Run BIOS Setup?

To run the BIOS Setup Utility, turn on the notebook and press the [F2] key during the POST procedure.

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and ON, or simultaneously pressing [Ctrl]+[Alt]+[Delete] keys to restart.

#### Info

✓ The screen shots and setting options in this chapter are for your references only.

The actual setting screens and options on your notebook may be different because of BIOS update.

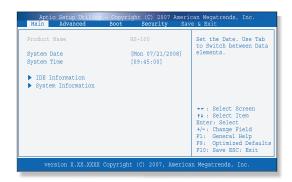
### **Control Keys**

You can use only the keyboard to control the cursor in the BIOS Setup Utility.

+	Press left arrow to select one menu title.
<b>→</b>	Press right arrow to select one menu title.
1	Press up arrow to select one item under the menu title.
1	Press down arrow to select one item under the menu title.
Shift + + =	Increase the setting value or make changes.
_	Decrease the setting value or make changes.
Feetor	1) Open the selected item to change setting options.
Enter	2) Bring up a sub-menu when available.
Tab	In some items, press this key to change setting field.
F1	Bring up help screen providing the information of control keys.
Esc	1) Exit the BIOS Setup Utility.
	2) Return to the previous screen in a sub-menu.

### **BIOS Setup Menu**

Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. Select the tags to enter the other menus.



### Main menu

Show system overview information about BIOS version, CPU features, memory size and setting of system time and date.

### Advanced menu

Configure IDE and USB settings.

### Boot menu

Set up boot type and boot sequence.

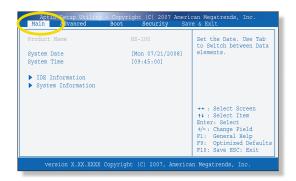
### Security Menu

Install or clear Supervisor's and user's password settings.

### Save & Exit Menu

Save or discard the changes before leaving the BIOS Setup Menu.

### Main menu



### ✓ System Time (Translation)

This item allows you to set the system time. The system clock will go on no matter you shut down the PC or get into sleep mode. The time format is [hour:minute:second].

### ✓ System Date (Translation)

This item allows you to set the system date. The date format is [day:month:date:year].

Day (Translation)	Day of the week, from Sun to Sat, which is determined by BIOS (read-only).
Month (Month)	The month from 01 (January) to 12 (December).
Date (Date)	The date from 01 to 31.
Year (Year)	The year can be adjusted by users.

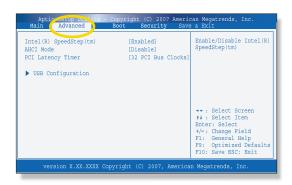
### ✓ IDE Information (Translation)

This item displays the types of the IDE devices installed in the notebook. Press [Enter] to bring up a window showing the detailed information of the device, including the device name, vendor, LBA mode, PIO mode and more, etc.

### ✓ System Information (Translation)

This item provides the information about the firmware, processor, and system memory.

### Advanced menu



### ✓ Intel(R) SpeedStep(tm) tech. (Translation)

This item allows you to enable or disable Intel SpeedStep technology. When set to Disabled, the system always operates in a conserve power mode (the processor works at FSB400-600MHz or FSB533-800MHz). If you want optimize the processor, set this item to Enabled, so that the processor's speed will be controlled by the use of your operating system and applications. Setting options: Enabled, and Disabled.

### ✓ AHCI Mode (Advanced Host Controller Interface)

Use this item to enable or disable the AHCI Mode. Setting options: Disabled and Enabled. The default setting is Disabled.

### ✓ Legacy USB Support (Translation)

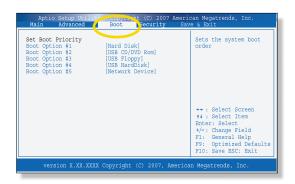
Selecting Enabled allows users to use USB devices, such as mouse, keyboard, or portable disk, in DOS system; or allows users to boot the system by USB device. Setting options: Enabled, Disabled and Auto.

### ✓ PCI Latency Timer

This item controls how long each PCI device can hold the bus before another takes over. When set to higher values, every PCI device can conduct transactions for a longer time and thus improve the effective PCI bandwidth.

For better PCI performance, you should set the item to higher values. Setting options: 32, 64, 96, 128, 160, 192, 224, and 248.

### Boot menu



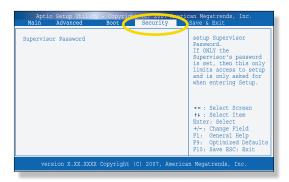
### ✓ Boot Device Priority

These items showing the sequence of boot devices where BIOS attempts to load the disk operating system.

### √ 1st, 2nd , and 3rd Boot Option

These items allow you to set the sequence of boot devices where BIOS attempts to load the disk operating system.

### Security menu



### ✓ Supervisor Password

When this function is selected, a message box will appear on the screen as below:



Type the password, up to six characters in length and press [Enter]. The password typed now will replace any previously set password from CMOS memory. You may also press [ESC] to abort the selection without entering a password.

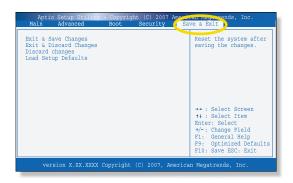
Setup	The password prompt appears only when end users try to run Setup.
Always	A password prompt appears every time when the notebook is powered on or when end users try to run Setup.

To clear the previous password, just press [Enter] when you are prompted to enter a new password. A message box will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

#### ✓ User Password

Set the User Password under this item. Note that Supervisor Password allows the user to enter and change the settings of the setup menu; User Password only allows the user to enter the setup menu, but do not have the right to make changes.

### Save & Exit menu



### ✓ Exit and Save Changes

Save the changes you have made and exit the utility.

### ✓ Exit and Discard Changes

Exit the utility without saving the changes you have made.

### ✓ Discard Changes

Abandon your changes and reload the previous configuration before running the utility.

### ✓ Load setup Defaults

Select this item to load the default settings.